

Amendments to the Specification:

Please replace the paragraph starting at page 5, line 3 with the following paragraph:

Particularly, in this exemplary embodiment, a fingerprint recognition apparatus and an LCD apparatus ~~that includes an image recognition apparatus having the same that recognizes an image pattern, for example,~~ such as ~~the a human fingerprint image recognition apparatus from a human being,~~ will be described. ~~That is, the object having the image pattern may comprises at least the fingerprint image of the human being~~ A fingerprint image recognition apparatus recognizes at least a human fingerprint and possibly other images.

Please replace the paragraph starting at page 5, line 9 with the following paragraph:

Referring to FIG. 2, an LCD apparatus includes an LCD panel 210 having liquid crystal 20 for transmitting a light in response to an electrical signal provided from an external source, a fingerprint recognition device 220 disposed on the LCD panel 210, for recognizing a fingerprint image corresponding to a light that is reflected from a sensing object, and a backlight assembly 215 disposed under the LCD panel 210, for providing ~~the~~ light to the LCD panel 210.

Please replace the paragraph starting at page 5, line 18 with the following paragraph:

The fingerprint recognition device 220 includes a transparent substrate 250 containing ~~having a transparent material, for example,~~ such as a glass, a fingerprint recognition sensor 260 formed on the transparent substrate 250, for sensing the fingerprint image of the sensing object, and a protection layer 270 formed over the transparent substrate 250 on which the fingerprint recognition sensor 260 is formed.

Please replace the paragraph starting at page 6, line 6 with the following paragraph:

The fingerprint recognition sensor 260 includes a first TFT 400, a second TFT 410 and a storage capacitor 420. The first TFT 400 acts as a sensing TFT that senses ~~a reflecting the light that~~ is reflected from the fingerprint image of the sensing object so as to output a fingerprint recognition signal, and the second TFT 410 acts as a switching TFT that is switched so as to allow the sensed fingerprint recognition signal to be ~~outputted~~ output to an external device. The storage capacitor

420 includes first and second electrodes 420a and 420b facing each other and ~~charges an electron~~
~~charge is charged to a value~~ corresponding to the fingerprint recognition signal output from the first
TFT 400.

Please replace the paragraph starting at page 7, line 25 with the following paragraph:

That is, the sensing and switching TFT gate lines 460 and 470 may intersect with the first
and second sides 300 and 310, the first and third sides 300 and 330 ~~320~~, first and fourth sides 300
and 330, second and third sides 310 and 330, second and fourth sides 310 and 330 or third and
fourth sides 320 and 330. The predetermined ~~slope of angle formed by~~ the sensing and switching
TFT gate lines 460 and 470 is from about 22.5 to about 45 degrees with respect to the fourth side
330.

Please replace the paragraph starting at page 8, line 8 with the following paragraph:

Thus, as shown in FIG. 3, a pixel area 50 that is defined by two sensing signal output lines
adjacent to each other, sensing TFT gate line 460, and switching TFT gate line 470 has a rectangular
shape that is positioned at an angle with respect to ~~pivoted on a predetermined direction against the~~
first, second, third and fourth sides 300, 310, 320 and 330 of the transparent substrate 250. When a
rectangular shape is “positioned at an angle with respect to” a side of the substrate, none of the sides
of the rectangle are parallel to the side of the substrate.

Please replace the paragraph starting at page 8, line 18 with the following paragraph:

That is, the sensing TFT gate line 460 and switching TFT gate line 470 are inclined in a
predetermined slope against a gate line 550 and a data line 560 of the LCD panel 210, so that the
pixel area 510 defined by two sensing signal output lines adjacent to each other, sensing TFT gate
line 460 and switching TFT gate line 470 has the rectangular shape that is positioned at an angle
with respect to ~~pivoted on the predetermined direction against~~ the first, second, third and fourth
sides 300, 310, 320 and 330 of the transparent substrate 250.

Please replace the paragraph starting at page 9, line 4 with the following paragraph:

As described above, the fingerprint recognition device 220 according to the exemplary
embodiment includes the sensing TFT gate line 460 and switching TFT gate line 470 ~~having the~~

~~predetermined slope~~ that are positioned at an angle with respect to the gate line 550 of the LCD panel 210. Thus, although the fingerprint recognition device 220 is ~~misaligned~~ not aligned with the LCD panel 210 ~~while~~ when the fingerprint recognition device 220 is combined with ~~to~~ the LCD panel 210, the LCD apparatus may prevent the appearance of a moiré image thereon.

Please replace the paragraph starting at page 9, line 19 with the following paragraph:

The light supplied to the transparent substrate 250 of the fingerprint recognition device 220 is reflected from the fingerprint image of the sensing object and supplied to the first channel area 403 of the first TFT 400, thereby turning on the first TFT 400. In response ~~Responsive~~ to the light, the storage capacitor 420 is charged ~~charges the electron charge~~ in proportion to the light amount of ~~light~~ that is supplied to the first channel area 403 of the first TFT 400.

Please replace the paragraph starting at page 10, line 5 with the following paragraph:

The second TFT 410 outputs a voltage signal proportional to the ~~electron charge charged~~ into charge in the storage capacitor 420 through the sensing signal output line 450. Also, since the drain electrode 412 of the second TFT 410 is connected to a data reading section (not shown) of an amplifying section (not shown) by means of the sensing signal output line 450, the voltage signal output from the second TFT 410 may be amplified ~~in~~ to a predetermined voltage level.

Please replace the paragraph starting at page 12, line 8 with the following paragraph:

That is, the first and second gate lines 660 and 680 may intersect with the first and second sides 700 and 710, first and third sides 700 and 720, first and fourth sides 700 and 730, second and third sides 710 and ~~730~~ 720, second and fourth sides 710 and 730 or third and fourth sides 720 and 730. The predetermined slope of the sensing and switching TFT gate lines 460 and 470 is from about 22.5 to about 45 degrees with respect to the fourth side 730.

Please replace the paragraph starting at page 12, line 16 with the following paragraph:

Thus, as shown in FIG. 6, a pixel area 690 that is defined by two sensing signal output lines adjacent to each other, a first gate line 660, and a second gate line 680 has a rectangular shape that is positioned at an angle with respect to ~~pivoted on a predetermined direction against~~ the first, second, third and fourth sides 700, 710, 720 and 730 of the transparent substrate 600.

Please replace the paragraph starting at page 12, line 20 with the following paragraph:

As described above, the fingerprint recognition device 220 according to another exemplary embodiment of the present invention includes the first and second gate lines 660 and 680 and sensing signal output line 670 that is positioned at an angle having the predetermined slope with respect to first, second, third and fourth sides 700, 710, 720 and 730 of the transparent substrate 600. Thus, although the fingerprint recognition device 220 is ~~misaligned~~ not aligned with the LCD panel 210 ~~while~~ when the fingerprint recognition device 220 is combined with ~~to~~ the LCD panel 210, the LCD apparatus may prevent the appearance of the moiré image thereon.

Please replace the paragraph starting at page 13, line 7 with the following paragraph:

The conductive sensing electrode 630 senses a capacitance corresponding to a distance between the fingerprint ~~image of the human finger~~ and the conductive sensing electrode 630. The capacitance may be different ~~according to~~ depending on a position of the fingerprint ~~image~~ because a fingerprint is made of ridges and valleys. ~~a~~ The distance between a “higher” ridge portion ~~that is protruded portion of the human finger~~ and the conductive sensing electrode 630 is different from ~~and the distance~~ between a “recessed” valley portion of the fingerprint ~~that is recessed portion~~ and the conductive sensing electrode 630 ~~is different from each other~~.

Please replace the paragraph starting at page 13, line 13 with the following paragraph:

The second TFT 620 is switched in response to the gate-on signal provided from the gate driving section (not shown) through the gate electrode 624 thereof and applies the voltage signal to the sensing signal output line 670. The voltage signal corresponds to ~~which is corresponding~~ the capacitance sensed by the conductive sensing electrode 630.

Please replace the paragraph starting at page 13, line 17 with the following paragraph:

As described above, the first and second gate lines 660 and 680 of the fingerprint recognition device 220 are inclined ~~in the predetermined slope~~ positioned at an angle with respect to first, second, third and fourth sides 700, 710, 720 and 730 of the transparent substrate 600. Also, the sensing signal output line 670 is substantially perpendicular to the first and second gate lines 660 and 680.

Please replace the paragraph starting at page 13, line 22 with the following paragraph:

Thus, although the first and second gate lines 660 and 680 of the fingerprint recognition device 220 are ~~misaligned~~ not aligned with gate and data lines of the LCD panel 210, the LCD apparatus may prevent the appearance of the moiré image thereon.